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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,046	01/17/2001	Masayuki Atokawa	P/1071-1244	5678

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EXAMINER

LEE, BENNY T

ART UNIT	PAPER NUMBER
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2817

DATE MAILED: 04/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



Patent and Trademark Office

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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.

EXAMINER	
ART UNIT	PAPER NUMBER
	10

DATE MAILED:

This is a communication from the examiner in charge of your application.

COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☒ Responsive to communication filed on 21 Nov 2002 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire Three (3) month(s), 30 days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-848. |
| 3. <input checked="" type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449 | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474 | 6. <input type="checkbox"/> |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-17 are pending in the application.
Of the above, claims 6-8; 10-17 are withdrawn from consideration.
2. ☐ Claims have been cancelled.
3. ☐ Claims are allowed.
4. ☒ Claims 1-5, 9 are rejected.
5. ☐ Claims are objected to.
6. ☒ Claims 1-17 are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.
8. ☐ Allowable subject matter having been indicated, formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. These drawings are ☐ acceptable; ☐ not acceptable (see explanation).
10. ☐ The ☐ proposed drawing correction and/or the ☐ proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed _____, has been ☐ approved. ☐ disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections **MUST** be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.
12. ☒ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☒ been received ☐ not been received
☐ been filed in parent application, serial no. _____; filed on _____.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

Art Unit: 2817

Applicant's election without traverse of Species I in Paper No. 7 is acknowledged.

Regarding claims 12-15, these claims were selected by applicants' as belonging to the elected species. However, because of the recited "substrate", these claims can not belong to the elected species.

Claims 4, 6-8, 10-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 7.

The disclosure is objected to because of the following informalities: Page 1, line 19, note that --of FIG. 18-- should follow "bandpass filter" for clarity of description. Page 2, line 4, note that --in FIG. 18-- should follow "shown" for clarity of description. Page 6, line 3, note that "Thereby" should be rewritten as --Therefore-- for clarity; line 19, note that "froth" should be correctly spelled as --forth--. Page 17, lines 1, 10, note that --(not shown in FIG. 3)-- should follow "D12" for a proper characterization. Page 26, line 8; page 28, line 3; page 29, line 23; page 31, line 15; page 33, line 26: at all occurrences, "excepting" should be rewritten as --except- for a better description. Page 29, lines 14, 15, note that the recitation "the voltage control electrode pattern 86" appears twice. Page 30, line 8, note that "21 to 23" should be rewritten as --21, 22, 23--. Page 32, line 26 and page 33, lines 3, 6, 7, note that --(not shown in FIG. 14)-- should follow "D11", "D12", "L11" and "L12", respectively. Note that reference labels (164, Transmission Filter, Reception Filter) need description in "FIG. 17".

Appropriate correction is required.

Art Unit: 2817

The drawings are objected to because of the following: In Figs. 5, 6, 7, 8, 9, 11, 12, note that “capacitors” (C_{s1} , C_{s2}) need to be respectively labeled; In fig. 13, reference label --12c-- needs to be provided. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claims 1-5, 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is unclear which one of the “at least one resonance electrode” is intended by the recitation of “the resonance electrode”.

In claim 3, note that it is unclear how the “voltage controllable reactance element” relates to the earlier recited “capacitance” (e.g. same as?).

In claim 9, note that reference to “at least two” electrodes appears contradictory to the single “electrode” as recited in claim 1. Moreover, reference to “a coupling adjustment element” is vague in meaning.

The following claims have been found objectionable for reasons set forth below:

Claim 5 is found objectionable since the subject matter herein is identical to that in claim 2 from which this claim directly depend, and thus this claim is not further limiting of claim 2.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2817

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by either McVeety et al (fig. 12) cited by applicants', Yorita et al ('674), fig. 2, Hoang (fig. 2) or Yamada (fig. 25).

Note that in each one of these references, a dielectric block filter is provided with at least one resonance electrode, a ground electrode or layer, input and output electrodes and a separate electrode (i.e. 122 in McVeety et al; 100 in Yorita et al; 102 in Hoang; 9 in Yamada) which provides a capacitance (through the dielectric block) with the corresponding resonance electrodes.

Claims 1, 3 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Ala-Kojola et al.

Ala-Kojola et al in Fig. 4 discloses a dielectric block filter (10) having resonance holes (6, 7) disposed within the dielectric block. The block has most side surfaces coated with a conductive material (i.e. ground layer). Conductive patterns (11, 12) constitute input/output electrodes while separated electrode (13) constitute a capacitively coupled regulating element for resonance holes (6, 7). Note that electrode (13) is coupled to a voltage from a control circuit (not shown) to thereby vary the capacitive coupling of electrode (13).

Art Unit: 2817

Claims 1, 2, 5, 9 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by either Yorita ('002) or Togami.

Note that each reference discloses a dielectric block filter (with resonance holes, ground layers, etc) having a stepped outer surface (i.e. 18 in Yorita; 1b in Togami) upon which input/output electrodes (10, 11 in Togami; 30a, 30b in Yorita) and a separated electrodes (6 in Togami; 28a, 28b in Yorita) are disposed. Note that in each reference, at least two separated electrodes (i.e. 5 separated electrodes (6) in Togami; two separated electrodes (28a, 28b) in Yorita) are provided in capacitive coupling with the resonance holes through the respective connections.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2817

Claims 3, 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yorita ('002) in view of Ala-Kojola et al.

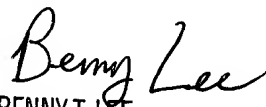
Yorita ('002) discloses the dielectric block filter with a stepped outer surface having separated electrodes for coupling to the resonance holes disposed thereon. However, Yorita fails to disclose such separated electrodes are coupled to a voltage responsive reactance element.

As described above in a previous rejection, Ala-Kojola et al also discloses a separated electrode on a side surface for capacitive coupling to resonance holes and further includes its connection to a semiconductive reactance (i.e. switching) element (9) responsive to an applied voltage control to selective adjust the capacitive coupling.

Accordingly, it would have been obvious in view of the references, taken as a whole, to have added a semiconductive reactance to separated electrodes (28a, 28b) of Yorita. Such a modification would have been considered obvious since it would have imparted the advantageous benefit of providing an adjustable capacitive coupling to a previously fixed capacitive coupling, thereby suggesting the obviousness of such a combination.

Any inquiry concerning this communication should be directed to Benny Lee at telephone number 308-4902.

Lee/ek
04/29/03


BENNY T. LEE
PRIMARY EXAMINER
ART UNIT 2817